

DEVAL L. PATRICK GOVERNOR TIMOTHY P. MURRAY LIEUTENANT GOVERNOR JUDYANN BIGBY, MD SECRETARY JOHN AUERBACH

COMMISSIONER

The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

04/18/2011

Sean Griffith Assistant District Attorney, Middlesex County

Dear ADA Griffith,

Enclosed is the information you requested in regards to Commonwealth vs. Included are copies of the following:

- 1. Drug Analysis Laboratory Receipt.
- 2. Curriculum Vitae for Annie Dookhan & Della Saunders.

3. Control Cards with analytical results for samples #

- 4. Analysis sheets with custodial chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Della Saunders was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Annie Khan (Dookhan)

Chemist II

Sincerely,

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6631

Annie.Khan@state.ma.us

PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

The Commonwealth of Massachusetts

Executive Office of Health and Human Services Department of Public Health

Boston Drug Laboratory Tel (617) 983-6622 Fax (617) 983-6625

State Laboratory Institute

Amherst Drug Laboratory Tel (413) 545-2601 Fax (413) 545-2608

Boston Hours

8:00 - 11:00

DRUG RECEIPT

Amherst Hours

9:00 - 12:00

2:00-4:00		1:00 - 3:00
City or Department: LOWELL	Police Reference No.:	
Name and Rank of Submitting Officer: DET. BRY	AN W. MCMAHON	
Defendant(s) Name (last, first, initial):		
To be completed by Submitter Description of Items Submitted	To be completed by	
Description of Items Submitted	Gross Weight	Lab Number
PBW/POWDER - COCAINE - 1	evo (2,339)	
PBW/FINGER" HEROIN - 1	6,559	
	in the second se	
Received by:	Date:	9-24-09

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- *Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- *Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- *Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- *Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- *Maintenance and repairs of all analytical instruments.
- *Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- *Responsible for the Quality Control/Quality Assurance program for the drug lab.
- *Notary Public.
- *Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- *Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- *Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- *Writing, revising and reviewing Standard Operating Procedures (SOPs).
- *Trained and supervised new chemists and interns for the department.
- *Routine QC testing of products for the FDA.
- *Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- *Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- *Complete testing of chemicals for Vendor Validation Project for the FDA.
- *Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Training:

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP course with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

Curriculum Vitae

Della Saunders

Education:

Boston University Boston, MA. Bachelors of Arts in Chemistry 1982

Experience:

1985-present: Currently Chemist III Massachusetts Department of Public Health Drug Analysis Laboratory at State Laboratory Institute Boston, MA. Responsible for analyzing unknown substances submitted by Massachusetts law enforcement agencies; operating, maintaining, and interpreting data from analytical equipment (analytical balance, microscope, gas chromatogram, ultraviolet spectrometer, infrared spectrometer, gas chromatogram/mass spectrometer); training junior level chemists; providing expert testimony to local, state, and federal courts in the Commonwealth of Massachusetts.

1984-1985: Laboratory Technician in the Media Laboratory at State Laboratory Institute Boston, MA. Responsible for making chemical reagents and media plates; operating and maintaining laboratory equipment (autoclave, pH meter, ultra-violet hood), and collecting safety data for laboratory protocols.

Training:

1985: Six week training with Senior Staff at Massachusetts Department of Public Health (MDPH) Drug Analysis Laboratory Boston, MA. Appointed Assistant Analyst MDPH

1987: One week training course in drug analysis given by the Federal Drug Enforcement Agency (DEA) McLean, VA.

1992: Training in Gas Chromatograph/Mass Spectroscopy (GC/MS) Hewlett Packard (Agilent)

1996: Training in Fourier Transform Infra-Red Spectroscopy ETA (Analect)

2001: Expert Witness Workshop National Laboratory Training network Quality Assurance/Quality Control Training (MDPH)

2002: Techniques of Supervision Training (MDPH)

1999: Notary Public Commonwealth of Massachusetts

No.

Date Analyzed: NOV 1 1 2009

City: Lowell Police Dept.

Officer: Detective BRYAN MCMAHON

Def:

Amount:

Cont: pb

No. Cont:

Subst: SUB

Date Rec'd: 09/24/2009

Gross Wt.: 15.23 No. Analyzed:

Net Weight: 14.00

#Tests: 6 A > O

Prelim: (occure

Findings:

Date Analyzed: NOV 1 1 2009

City: Lowell Police Dept.

Officer: Detective BRYAN MCMAHON

Def:

Amount: No. Cont:

Gross Wt.:

Cont: pb

Date Rec'd: 09/24/2009

6.55

No. Analyzed:

Net Weight: 조 나 역

Tests: ビャン

Subst: SUB

Prelim: Heroin

DRUG POWDER ANALYSIS FORM

SAMPLE # AGEN	CY Lowell ANALYST AS9
No. of samples tested:	Evidence Wt.
PHYSICAL DESCRIPTION:	Gross Wt (): 14.4490
while powdered) substace Gross Wt ():
17,69	Pkg. Wt:
	Net Wt: 14-0014
	Netret = 13.9935
Mether ABION 1	N 7132562
0/www 20010 1	125443264
	•
PRELIMINARY TESTS Spot Tests	Microcrystalline Tests
Cobalt Thiocyanate (+)	Gold Chloride +
Marquis	TLTA <u>(→)</u>
Froehde's	OTHER TESTS
Mecke's	
•	,
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS COCCUAG	RESULTS (O Caro
DATE 11-09	MS OPERATOR DCS
	DATE 11-11-09

DRUG POWDER ANALYSIS FORM

SAMPLE # AGENO	Evidence Wt.
PHYSICAL DESCRIPTION:	Gross Wt(): <u>১.১৭</u> ১১
-	
Borok charica en	•
19 162	Pkg. Wt:
wax papper +	Net Wt: 5.1468
Metter ABION 1 Ohicers NO110	
PRELIMINARY TESTS Spot Tests	Microcrystalline Tests
Cobalt	Gold Chlorido
Marquis	TLTA ()
Froehde's +	OTHER TESTS
Mecke's +	
	· · · · · · · · · · · · · · · · · · ·
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS Heron	RESULTS HEGOLY
DATE 11-4-09	MS OPERATOR N
	DATE 11-11-09

Information from Data File:

File Name : E:\Q4-2009\SYSTEM7\11_10_09\682136.D

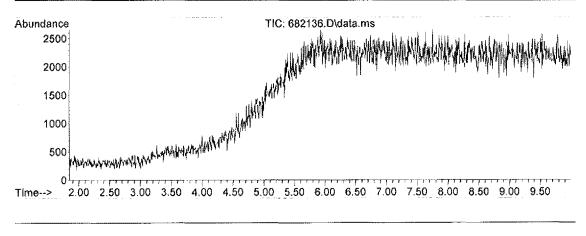
: DCS Operator

Date Acquired : 10 Nov 2009 16:53

Sample Name : BLANK

Submitted by

Vial Number 1 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time

Area

Area %

Ratio %

NO INTEGRATED PEAKS

Page 1 / slali flet

File Name : $E:\Q4-2009\SYSTEM7\11\ 10\ 09\682137.D$

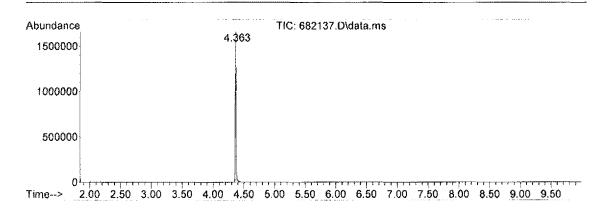
Operator : DCS

Date Acquired : 10 Nov 2009 17:06 Sample Name : COCAINE STANDARD

;

Submitted by

Vial Number : 37 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.363	1490657		100.00

File Name : E:\Q4-2009\SYSTEM7\11 10 09\682137.D

Operator : DCS

Date Acquired : 10 Nov 2009 17:06 Sample Name : COCAINE STANDARD

Submitted by

Vial Number : 37 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80

C:\Database\NIST05a.L

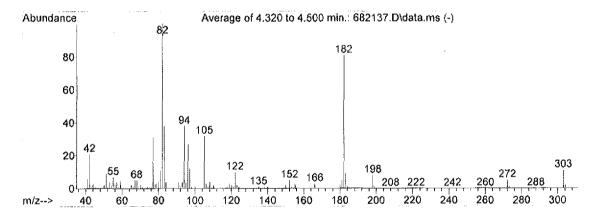
Minimum Quality: 70

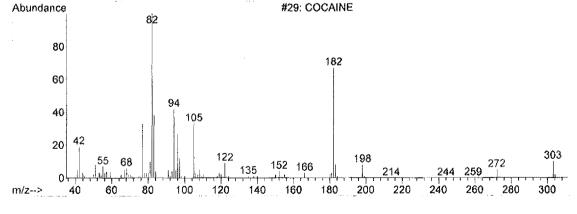
99

C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual

1 4.36 C:\Database\SLI.L COCAINE 000050-36-2



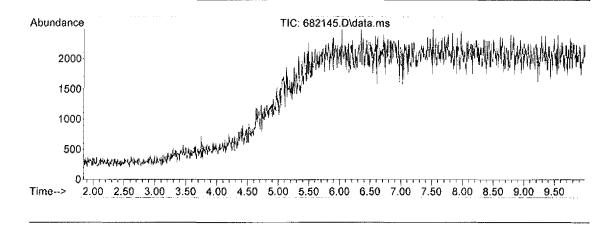


File Name : E:\Q4-2009\SYSTEM7\11 10 09\682145.D

Operator : DCS

Date Acquired : 10 Nov 2009 18:47

Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time

Area

Area

Ratio %

NO INTEGRATED PEAKS

File Name : E:\Q4-2009\SYSTEM7\11_10_09\682146.D

: DCS Operator

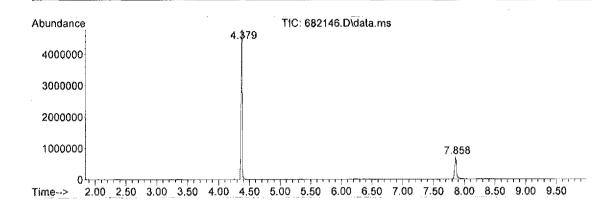
Date Acquired : 10 Nov 2009 18:59

Sample Name Submitted by

: ASD 46

Vial Number AcquisitionMeth: DRUGS.M Integrator

: RTE



Ret. Time	Area	Area %	Ratio %
4.379	6363927		100.00
7.858	1650876		25.94

File Name : E:\Q4-2009\\$YSTEM7\11_10_09\682146.D

Operator : DCS

Date Acquired : 10 Nov 2009 18:59

Sample Name :

Submitted by : ASD
Vial Number : 46
AcquisitionMeth: DRUGS.M
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

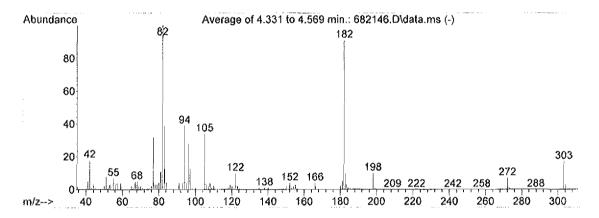
C:\Database\NIST05a.L Minimum Quality: 70

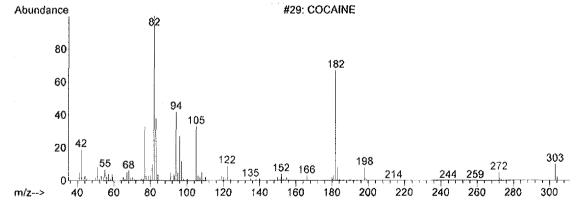
C:\Database\PMW_TOX2.L

PK# RT Library/ID CAS# Qual

1 4.38 C:\Database\SLI.L







File Name : E:\Q4-2009\SYSTEM7\11_10_09\682146.D

Operator : DCS

Date Acquired : 10 Nov 2009 18:59

Sample Name :

Submitted by : ASD
Vial Number : 46
AcquisitionMeth: DRUGS.M
Integrator : RTE

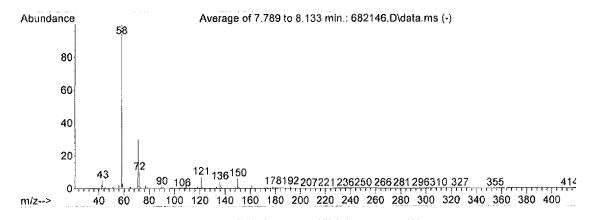
Search Libraries: C:\Database\SLI.L

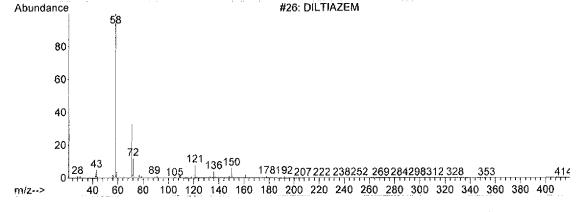
ase\SLI.L Minimum Quality: 80 ase\NIST05a.L Minimum Quality: 70

C:\Database\NIST05a.L

C:\Database\PMW_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
2	7.86	C:\Database\SLI.L DILTIAZEM 3,4-MDMA CITALOPRAM	033286-22-5 042542-10-9 059729-33-8	91 50 2





File Name : E:\Q4-2009\SYSTEM7\11 10 09\682153.D

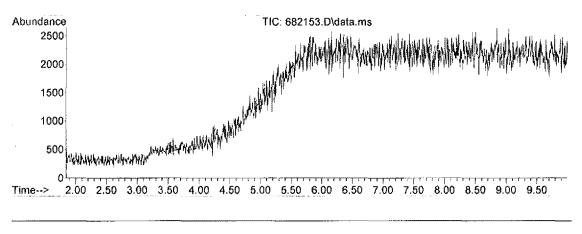
Operator : DCS

Date Acquired : 10 Nov 2009 20:28

Sample Name : BLANK

Submitted by

Vial Number : 2 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time

Area

Area %

Ratio %

NO INTEGRATED PEAKS

Information from Data File:

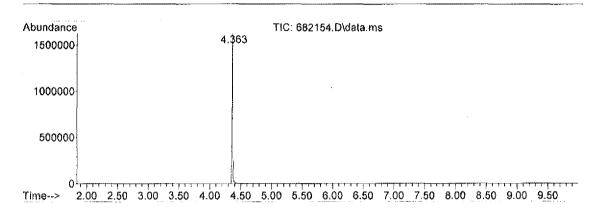
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Operator : DCS

Date Acquired : 10 Nov 2009 20:41 Sample Name : COCAINE STANDARD

Submitted by

Vial Number : 54 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	
4.363	1460563		

File Name : E:\Q4-2009\SYSTEM7\11 10 09\682154.D

Operator : DCS

Date Acquired : 10 Nov 2009 20:41 Sample Name COCAINE STANDARD

Submitted by

RT

PK#

Vial Number 54 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 70

C:\Database\NIST05a.L

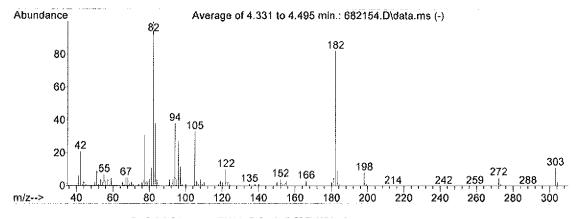
C:\Database\PMW TOX2.L

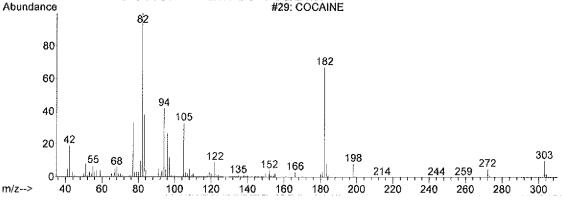
CAS# Library/ID Qual

4.36 C:\Database\SLI.L

COCAINE

000050-36-2 99





Information from Data File:

File Name : E:\Q4-2009\SYSTEM4\11 10 09\682004.D

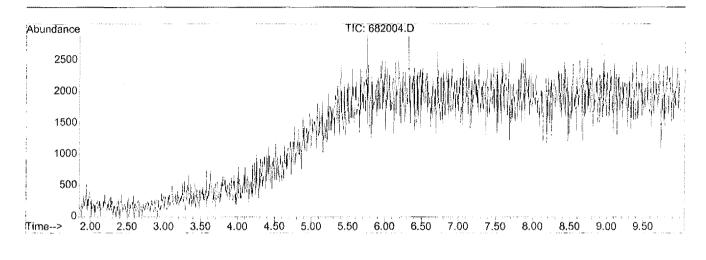
Operator : DCS

Date Acquired: 10 Nov 2009 9:57

Sample Name : BLANK

Submitted by :

Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

NO INTEGRATED PEAKS

10/9/11 fle

Wed Feb 09 16:23:22 2011

Information from Data File:

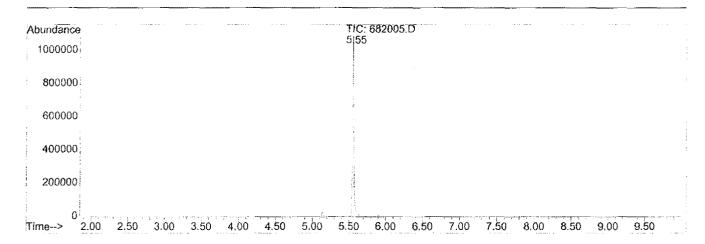
File Name : $E:\Q4-2009\SYSTEM4\11\ 10\ 09\682005.D$

Operator : DCS

Date Acquired : 10 Nov 2009 10:10 Sample Name : HEROIN STANDARD

Submitted by

Vial Number : 5 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
5.554	1402099	100.00	100.00

File Name : $E: \Q4-2009\SYSTEM4\11\ 10\ 09\682005.D$

Operator : DCS

Date Acquired : 10 Nov 2009 10:10 Sample Name : HEROIN STANDARD

Submitted by

Vial Number : 5 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90
Minimum Quality: 90

C:\DATABASE\PMW_TOX2.L

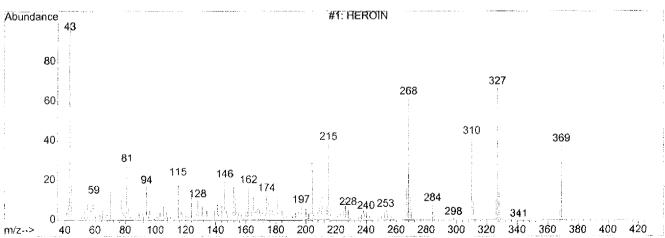
C:\DATABASE\NIST98.L

PK# RT Library/ID CAS# Qual

1 5.55 C:\DATABASE\SLI.L HEROIN

000561-27-3 96

Average of 5.523 to 5.692 min.: 682005.D (-) Abundance 43 80 327 60 268 369 310 40 204 81 ¹⁴⁶ 162 115 20 174 128 ²²⁶ ₂₃₉ 253 Ka JJ. 187 298 341352 406 180 200 220 240 260 280 300 320 340 360 m/z--> 80 100 120 140 160 400



682005.D

Wed Feb 09 16:23:27 2011

Page 2

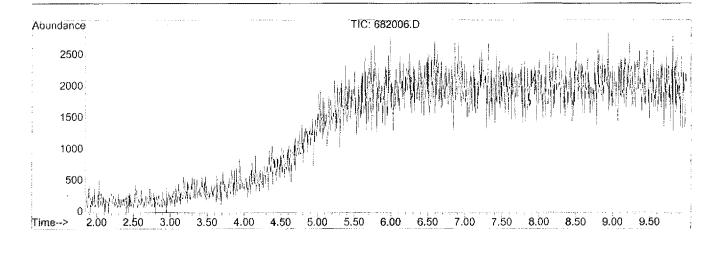
Information from Data File:

File Name : E:\Q4-2009\SYSTEM4\11 10 09\682006.D

Operator : DCS

Date Acquired : 10 Nov 2009 10:24

Sample Name : BLANK Submitted by : ASD Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

^{***}NO INTEGRATED PEAKS***

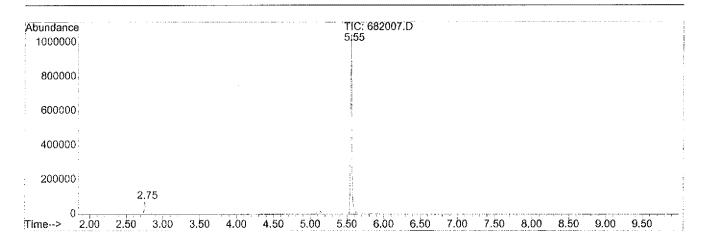
File Name : E: Q4-2009 SYSTEM4 11 10 09 682007.D

Operator : DCS

Date Acquired : 10 Nov 2009 10:37

Sample Name :

Submitted by : ASD
Vial Number : 7
AcquisitionMeth: DRUGS
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
2.748	153015	10.73	
5.551	1273143	89.27	

File Name : $E:\Q4-2009\SYSTEM4\11\ 10\ 09\682007.D$

Operator : DCS

Date Acquired : 10 Nov 2009 10:37

Sample Name :

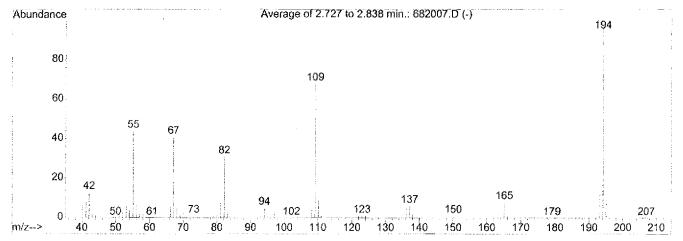
Submitted by : ASD Vial Number : 7 AcquisitionMeth: DRUGS Integrator : RTE

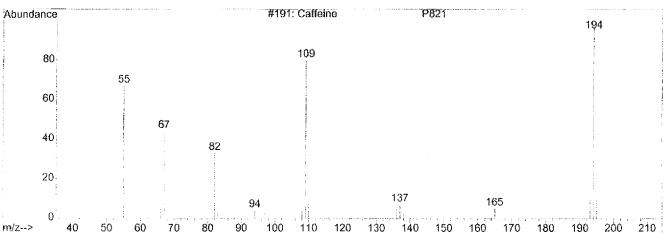
Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90

C:\DATABASE\PMW TOX2.L Minimum Quality: 90

C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	2.75	C:\DATABASE\PMW_TOX2.L Caffeine Endogenous biomolecule 2AC Formetanate -C2HNO	000058-08-2 000000-00-0 000000-00-0	96 9





682007.D

Wed Feb 09 16:23:36 2011

Page 2

File Name : E:\Q4-2009\SYSTEM4\11 10 09\682007.D

Operator : DCS

Date Acquired 10 Nov 2009 10:37

Sample Name

Submitted by ASD 7 Vial Number AcquisitionMeth: DRUGS Integrator : RTE

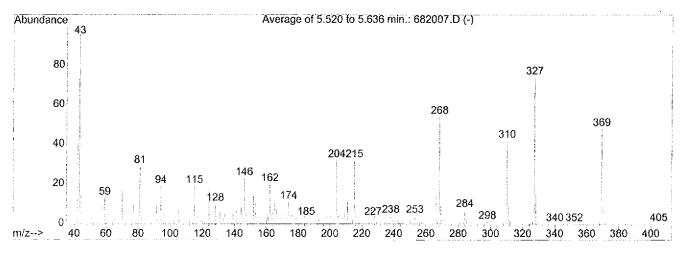
Search Libraries: C:\DATABASE\SLI.L

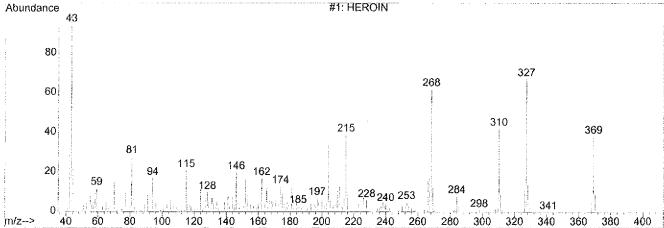
Minimum Quality: 90 Minimum Quality: 90

C:\DATABASE\PMW TOX2.L

C:\DATABASE\NIST98.L

PK# RT Library/ID CAS# Qual 2 5.55 C:\DATABASE\SLI.L HEROIN 000561-27-3





682007.D

Wed Feb 09 16:23:36 2011

Page 3 99

Information from Data File:

File Name : E:\Q4-2009\SYSTEM4\11_10_09\682029.D

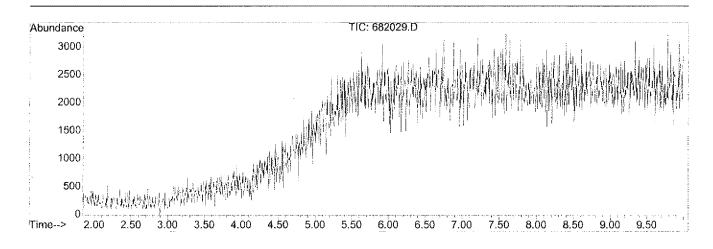
Operator : DCS

Date Acquired : 10 Nov 2009 15:38

Sample Name : BLANK

Submitted by :

Vial Number : 1 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time Area Area % Ratio %

NO INTEGRATED PEAKS

Information from Data File:

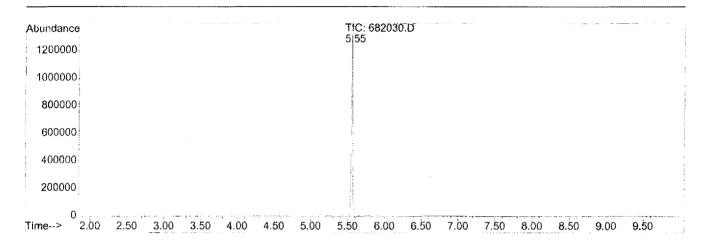
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Operator : DCS

Date Acquired : 10 Nov 2009 15:52 Sample Name : HEROIN STANDARD

Submitted by :

Vial Number : 30 AcquisitionMeth: DRUGS Integrator : RTE



Ret. Time	Area	Area %	Ratio %
5.554	1600372	100.00	100.00

File Name : E:\Q4-2009\SYSTEM4\11 10 09\682030.D

Operator DCS

Date Acquired : 10 Nov 2009 15:52 Sample Name : HEROIN STANDARD

Submitted by

Vial Number 30 AcquisitionMeth: DRUGS Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L

Minimum Quality: 90 Minimum Quality: 90

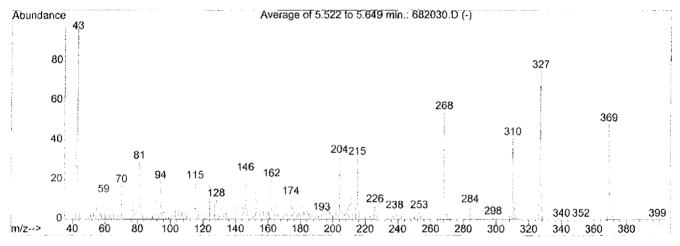
C:\DATABASE\PMW TOX2.L

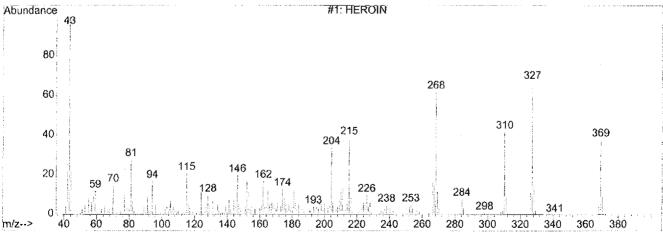
C:\DATABASE\NIST98.L

PK# RT Library/ID CAS# Qual

1 5.55 C:\DATABASE\SLI.L

HEROIN 000561-27-3 99





682030.D

Wed Feb 09 16:24:21 2011

Page 2